Claims

1 A latch device for use with a portable electrical apparatus, the portable electrical apparatus having a predetermined device and a housing, the latch device preventing separation of the predetermined device from the housing, the latch device comprising:

a support connecting to the housing;

a latch for latching the predetermined device; and

a first saw-toothed elastic strip, one end of the first saw-toothed elastic strip connecting to the support and another end connecting to the latch for allowing the latch to move relative to the support.

2 The latch device of claim 1, wherein the predetermined device includes a keyboard.

3 The latch device of claim 1, wherein the latch latches the predetermined device when a part of the latch sticks out from the housing, the latch deforms the first saw-toothed elastic strip when an external force forces the latch to separate from the predetermined device, and the first saw-toothed elastic strip provides a recovering force forcing a part of the latch to spring out of the housing.

4 The latch device of claim 1, further comprising a second saw-toothed elastic strip, both ends of the second saw-toothed elastic strip respectively connecting to two corresponding ends of the first saw-toothed elastic strip, the first saw-toothed elastic strip and the second saw-toothed elastic strip together forming a close loop.

5 The latch device of claim 1, wherein the first saw-toothed elastic strip includes a V-shaped strip.

6 The latch device of claim 1, wherein the first saw-toothed elastic strip includes a U-shaped strip.

7 The latch device of claim 1, wherein the latch device is formed integrally.

8 The latch device of claim 1, wherein the first saw-toothed elastic strip is disposed between the support and the latch.

9 The latch device of claim 1, wherein the support connects to the housing dovetailedly.

10 A portable electrical device, comprising the latch device of claim 1,2,3,4,5,6,7,8 or 9.

11 A latch device for use with a portable electrical apparatus, the portable electrical apparatus having a predetermined device and a housing, the latch device preventing separation of the predetermined device from the housing, the latch device comprising:

a support connecting to the housing;

a latch for latching the predetermined device; and

a first arc-shaped elastic strip for allowing the latch to move relative to the support, both ends of the first arc-shaped elastic strip respectively connecting to the latch, the support connecting to the first arc-shaped elastic strip at a location between the two ends of the first arc-shaped elastic strip.

12 The latch device of claim 11, wherein the predetermined device includes a keyboard.

13 The latch device of claim 11, wherein the latch latches the predetermined device when a part of the latch sticks out from the housing, the latch deforms the first arc-shaped elastic strip when an external force forces the latch to separate from the predetermined device, and the first arc-shaped elastic strip provides a recovering force forcing a part of the latch to spring out the housing.

14 The latch device of claim 11, further comprising a second arc-shaped elastic strip, both ends of the second arc-shaped elastic strip respectively connecting to two

corresponding ends of the first arc-shaped elastic strip, the first arc-shaped elastic strip and the second arc-shaped elastic strip together forming a close loop, the latch connecting to the second arc-shaped elastic strip between the two ends of the second arc-shaped elastic strip.

15 The latch device of claim 13, wherein the latch device is formed integrally.

16 The latch device of claim 13, wherein the first arc-shaped elastic strip is disposed between the support and the latch.

17 The latch device of claim 13, wherein the support connects to the housing dovetailedly.

18 A portable electrical device, comprising the latch device of claim 13,14,15,16 or 17.